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Code: Project: Toward sustainable batteries based on silicon, sulfur and biomass-derived carbon (2BoSS) Area: Advanced Materials for Energy Area leader: Prof. Joan Ramon Morante Group: Functional Nanomaterials Group Group leader: Prof. ICREA Andreu Cabot

The Functional Nanomaterials Group in the Advanced Materials for Energy Area of IREC announces a predoctoral research position available for a highly motivated candidate to work in the European project 2BoSS: Toward sustainable batteries based on silicon, sulfur and biomass-derived carbon.

Predoctoral Research Position

The 2BoSS project will develop an innovative, durable and more circular battery technology based on a Li-S chemistry, the processing of part of the required raw materials, and the associated recycling strategies to minimize the use of critical raw materials. 2BoSS will turn commercial batteries compatible with a more circular economy, enhancing their performance, extending their service life, and assuring a more sustainable production and the entire lifecycle.

The candidate will focus on the synthesis of Li₂S-biocarbon composites, their characterization and their use as cathode electrodes in Li-S batteries.

The candidate must have a bachelor and a master degree in Chemistry, Physics, Material Science or equivalent and previous experience in the synthesis of these compounds and/or the fabrication and test of Li-S batteries.

Additional information:

- CV, personal references and a motivation letter have to be sent to Dr. Andreu Cabot (acabot@irec.cat and irecjobs@irec.cat), indicating "Ref.23/2023" in the subject.
- Deadline for applications: April 12nd 2023, 12:00 AM (Spanish local time)
- Incorporation: June 2023
- Duration of the contract: 12 months

The recruitment process will follow the guidelines of the European Charter of Researchers. Further information can be directly obtained from: Andreu Cabot (<u>acabot@irec.cat</u>)